## ABSTRACT OF THE DISCLOSURE

[0096] Electronic Circuit Building Blocks are mechanically connected to each other to form larger circuit boards using a mechanical bridge connector. The Electronic Circuit Building Blocks include female interlocking elements formed on its edges, and the mechanical bridge connector includes male interlocking elements. Half parts of the male interlocking elements of the mechanical bridge connector are inserted into the corresponding female interlocking elements of the Electronic Circuit Building Blocks from one side of the circuit board. The Electronic Circuit Building Blocks include through-holes for mounting through-hole components and/or surface-mount pads for mounting surface-mount components. The Electronic Circuit Building Blocks also include traces interconnecting two or more of the through-hole components and the surface-mount components.